

REMARKS/ARGUMENTS

Applicants have received the Office Action dated August 7, 2009, in which the Examiner rejected claims 1-8 under 35 U.S.C. § 101 as not being directed to statutory subject matter and rejected all claims 1-19 under 35 U.S.C. § 102 as anticipated by Ausebel (U.S. Pat. No. 6,021,398). With this Response, Applicants amend claims 1 and 5 to address the § 101 rejections and traverse the art rejections. Based on the amendments and arguments contained herein, Applicants believe this case to be in condition for allowance.

I. NOTE ON STATUS OF OFFICE ACTION

Page 16 of the Office Action states that the Action is made “final.” The Examiner, however, clarified to the undersigned over the telephone on October 6, 2009, that the present Office Action is not to be considered “final.” Further, the new ground of rejection (the § 101 rejections) was not necessitated by amendment previously made by Applicants.

II. REJECTIONS UNDER 35 U.S.C. § 101

Claims 1-8 are method claims. Applicants have amended independent claims 1 and 5 to require each claimed operation to be performed by a processor. The amendments are well-supported by the specification such as at pp. 8-9 paragraph 31. In *Bilski*, the Federal Circuit held that a method claim that is directed to a particular machine complies with § 101. *In re Bilski*, 545 F.3rd 943, 961 (Fed. Cir. 2008). Claims 1-8 have been amended to tie those method claims to a particular machine and thus comply with § 101.

III. THE ART REJECTIONS OVER AUSEBEL

Applicants provide the following reasons why the claims are allowable over Ausebel. These reasons were provided in Applicants' previous appeal brief, but the Examiner does not seem to have specifically addressed these points. Instead, the Examiner seems to have simply repeated the previous rejections. Unless the Examiner allows the case, Applicants respectfully request that the Examiner address the points raised by Applicants below.

A. Claims 1-19 are allowable

Claim 1 is as follows:

A method of analyzing auction data, comprising:
organizing, by a processor, previously acquired auction data into a plurality of sub-samples, each sub-sample comprising bid data associated with auctions having a common number of bidders, the number of bidders varying among the sub-samples;
applying, by the processor, an inverse bid function to at least two sub-samples;
pooling, by the processor, results from applying the inverse bid function to form a first pool;
applying, by the processor, a direct bid function on the first pool to generate sample bids;
matching, by the processor, bids from at least one sub-sample to the sample bids; and
pooling, by the processor, results from the matching with the first pool to form a second pool.

The Examiner believes claim 1 to be anticipated by Ausebel and thus that Ausebel discloses each and every limitation of claim 1. Applicants disagree for multiple reasons.

Claim 1 requires that previous auction data is organized into a plurality of sub-samples and that "each sub-sample comprising bid data associated with auctions having a common number of bidders, the number of bidders varying among the sub-samples." For this quoted limitation, the Examiner cited Ausebel at col. 6 lines 39-43 which provides:

A message is a signal or data sent from the auctioneer's system to user i's system. A message may include (but is not required to include or restricted to including) each of the following: the current proposed terms of trade for the auction (e.g. prices and/or quantities), information about the history of bidding (e.g. the total quantity bidders demanded in response to the previous message, the number of remaining bidders, or their identities), an indicator of whether the auction is still in process, a time stamp, the identity of the bidder to whom the message is directed, and information used for security purposes. The set of possible messages includes the null message.

Applicants fail to understand how that passage from Ausebel teaches that sub-samples of auction data in which each sub-sample comprises bid data for

auctions having the same number of bidders, with the number of bidders varying from one sub-sample to the next. Applicants do not believe that Ausebel at all teaches this claim limitation.

Claim 1 also requires “applying an inverse bid function to at least two sub-samples.” The Examined used Ausebel at col. 6 lines 50-51 for this limitation. Those two lines specify that “[b]idding information may include a bidding rule such as a scalar-value, vector-value or function....” That passage, or elsewhere in Ausebel, does not at all teach or even allude to the use of an inverse bid function.

Claim 1 further requires “pooling results from applying the inverse bid function to form a first pool.” The Examined used Ausebel at col. 6 lines 60-63 for this limitation. Those lines specify that “[b]idding rule may indicate the willingness to make an unconditional bid or a contingent bid, and may consist of a function based on available information as to bid quantities... .” That passage, or elsewhere in Ausebel, does not all teach or even suggest pooling results from applying the inverse bid function to form a first pool.

Claim 1 also requires “applying a direct bid function on the first pool to generate sample bids.” The Examined used Ausebel at col. 6 lines 60-63 for this limitation. The Examiner used this same passage of Ausebel for allegedly teaching a different claim limitation (“pooling results from applying the inverse bid function to form a first pool”). Even if the quoted passage from Ausebel did teach “pooling results from applying the inverse bid function to form a first pool” (which Applicants dispute as discussed above), that very same passage certainly cannot be said to teach a different limitation. At any rate, col. 6 lines 60-63 (“[b]idding rule may indicate the willingness to make an unconditional bid or a contingent bid, and may consist of a function based on available information as to bid quantities”) does not at all teach “applying a direct bid function on the first pool to generate sample bids.”

The last two limitations of claim 1 comprise “matching bids from at least one sub-sample to the sample bids” and then “pooling results from the matching with the first pool to form a second pool.” For both of these limitations, the Examiner cited to col. 33 lines 19-22 of Ausebel. Applicants fail to understand

how the quoted passage, if it did indeed teach “matching bids from at least one sub-sample to the sample bids,” could also be said to teach a different limitation (“pooling results from the matching...”), or vice versa. At any rate, the quoted passage mentions “compare[ing] current maximized bid revenues M with a function of the maximized bid revenues obtained in previous iteration(s) of the loop...” Comparing maximized bid revenues between iterations of a loop is not at all the same as matching bids from at least one sub-sample to the sample bids as required by the claim. Further, there is no teaching at col. 33 lines 19-22, or elsewhere in Ausebel of pooling the results from the matching with the first pool to form a second pool.

For any or all of these reasons, claims 1 and its dependent claims are allowable over Ausebel. The remaining independent claims and their dependent claims contain one or more of the limitations discussed above and thus are allowable for much the same reasons.

B. Additional reasons why claims 5-7 and 17-19 are allowable

Additional reasons exist to support the patentability of independent claims 5 and 17. Claim 5 requires “combining the first and second pseudo values together to produce combined auction values.” Claim 17 similarly requires “at least one instruction that combines the first and second pseudo values together to produce combined auction values.” The Examiner used col. 6 lines 50-51 for this limitation. However, the Examiner used these two lines of Ausebel as allegedly teaching a completely different limitation. In claim 1, the Examiner alleged that col. 6 lines 50-51 taught “applying an inverse bid function to at least two sub-samples.” Applicants fail to understand the Examiner’s logic. Specifically, if “[b]idding information may include a bidding rule such as a scalar-value, vector-value or function” (Ausebel col. 6 lines 50-51) teaches “applying an inverse bid function to at least two sub-samples,” Applicants fail to understand how that same passage from Ausebel can also be said to teach “combining the first and second pseudo values together to produce combined auction values” as in claims 5 and 17. At any rate, the quoted passage from Ausebel has no such teaching for the quoted limitation of claims 5 and 17.

For this additional reason, the Examiner erred in rejecting claims 5 and 17 and their dependent claims.

CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

/Jonathan M. Harris/

Jonathan M. Harris
PTO Reg. No. 44,144
CONLEY ROSE, P.C.
(713) 238-8000 (Phone)
(713) 238-8008 (Fax)
ATTORNEY FOR APPLICANTS

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
Legal Dept., M/S 35
3404 E. Harmony Road
Fort Collins, CO 80528-9599